

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended): A method of continuously ~~or semi-continuously~~ producing a solid product comprising precipitated calcium carbonate suspended in an aqueous medium which method comprises

(i) continuously ~~or semi-continuously~~ delivering an aqueous suspension of a calcium ion source into and through a single-pass channel comprising a series of at least two static in-line mixers, wherein said aqueous suspension of a calcium ion source is chosen from an aqueous suspension of calcium hydroxide and an aqueous suspension of slaked calcium oxide;

(ii) continuously ~~or semi-continuously~~ introducing carbon dioxide into the suspension in the channel at or before each of the mixers

whereby carbon dioxide and the aqueous suspension are intimately mixed in each mixer to facilitate reaction of the carbon dioxide with the calcium ion source suspended in the aqueous medium,

the calcium ion source in the suspension delivered to the series of static in-line mixers being progressively consumed and converted to calcium carbonate by reaction with the carbon dioxide as the suspension passes through the series, and

(iii) continuously ~~or semi-continuously~~ extracting from the channel said precipitated calcium carbonate suspended in an aqueous medium, produced by reaction of the calcium ion source and carbon dioxide in the channel.

2. (Original): A method as claimed in claim 1 and wherein the series of in-line static mixers comprises at least three such mixers.

3. (Original): A method as claimed in claim 2 and wherein the series of in-line static mixers comprises from four to seven such mixers.

4. (Original): A method as claimed in claim 1 and wherein each of the static in-line mixers comprises an outer casing and a plurality of internal static vanes or baffles which cause the suspension to undergo changes of direction.

5. (Original): A method as claimed in claim 1 and wherein each of the static in-line mixers permits carbon dioxide to be uniformly distributed through the mixed suspension in the form of fine bubbles.

6. (Original): A method as claimed in claim 1 and wherein the aqueous suspension enters the first of the series of mixers at a hydraulic pressure in the range of 50kPa to 100kPa.

7. (Original): A method as claimed in claim 1 and wherein the hydraulic pressure of the aqueous suspension progressively falls as it passes through the series of static in-line mixers.

8. (Original): A method as claimed in claim 1 and wherein carbon dioxide is delivered to be mixed with the suspension in the first in-line mixer in the series at a pressure in the range of 50kPa to 150kPa.

9. (Original): A method as claimed in claim 8 and wherein the carbon dioxide is delivered to be mixed with the suspension in at least two subsequent in-line mixers in the series at pressures reduced progressively from mixer-to-mixer.

10. (Original): A method as claimed in claim 1 and wherein the carbon dioxide to be mixed with the suspension each in-line static mixer is delivered along a separate conduit for each mixer with the suspension.

11. (Original): A method as claimed in claim 10 and wherein the carbon dioxide delivered along each conduit is provided by a common source.

12. (Original): A method as claimed in claim 10 and wherein each conduit incorporates means for independently adjusting the pressure of the carbon dioxide delivered to be mixed with the aqueous suspension.

13. (Original): A method as claimed in claim 1 and wherein the aqueous suspension includes non-consumable solids to be entrained by and bonded to the precipitated calcium carbonate produced in the aqueous medium.

14. (Original): A method as claimed in claim 13 and wherein the non-consumable solids comprise fibres and/or particles.

15. (Original): A method as claimed in claim 13 and wherein the non-consumable solids comprise cellulose fibres and/or inorganic pigment particles.

16. (Original): A method as claimed in claim 14 and wherein the non-consumable solids comprise fines.

17. (Original): A method as claimed in claim 16 and wherein the fines have been obtained from an aqueous effluent of an industrial process.

18. (Original): A method as claimed in claim 17 and wherein the fines have been obtained from an aqueous effluent from a paper making or paper coating process.

19. (Previously Presented): A method as claimed in claim 13 and wherein the non-consumable solids constitute from 0.5% to 20% by weight of the aqueous suspension of the non-consumable solids in the aqueous medium.

20. (Previously Presented) A method as claimed in claim 13 and wherein the ratio by dry weight of the non-consumable solids to calcium ion source delivered to be mixed with carbon dioxide in the first in-line static mixer is in the range of 1:10 to 10:1.

21. (Previously Presented) A method as claimed in claim 20 and wherein an aqueous suspension of the non-consumable solids and an aqueous suspension of the calcium ion source are mixed together in a static in-line mixer to produce the aqueous suspension to be delivered to the first in-line static mixer.

22. (Canceled)